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10/737,042

12/15/2003

Lester F. Ludwig

2738-033

4753

35884

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10/31/2006

LEE, HONG, DEGERMAN, KANG & SCHMADEKA
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EXAMINER

WARREN, DAVID S

ART UNIT

PAPER NUMBER

2837

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/737,042

Applicant(s)

LUDWIG, LESTER F.

Examiner

David S. Warren

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

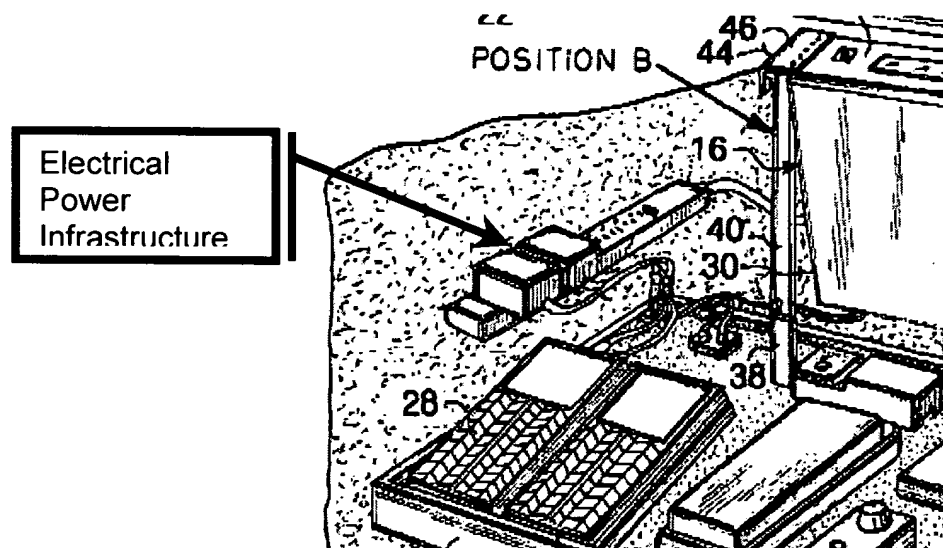
Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

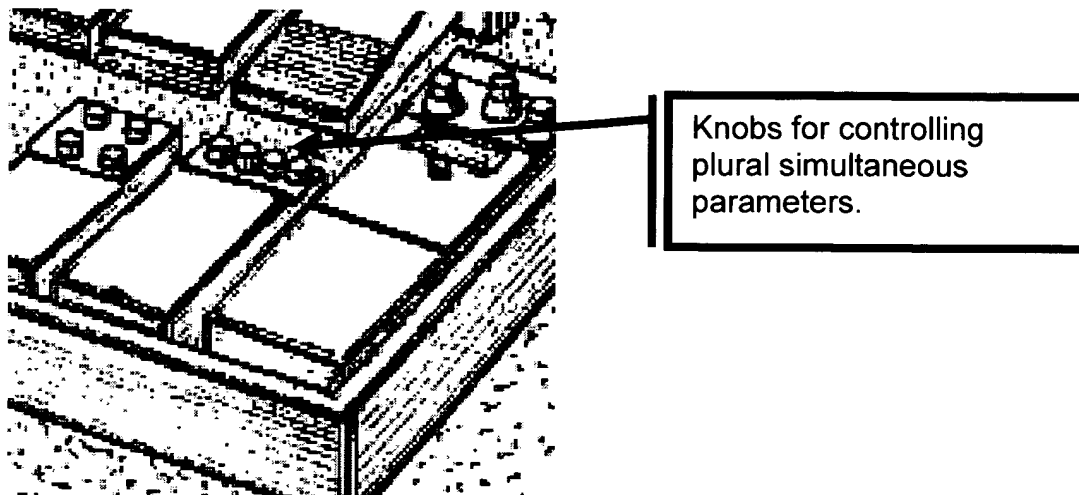
2. Claims 1 – 10 and 12 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecoraro (5,866,829) in view of Furman Sound, Inc. (Stereo Pedal Board Model SPB-8 Instruction Sheet, Furman Sound, Inc., see press release to establish prior art date of December 14, 2002; hereinafter “Furman”). Regarding independent claims 1 and 15, Pecoraro discloses the use of plural foot controllers (14, 26; figs. 3 and 7), mounting frame and means for securing modules, i.e., foot controllers are retained within the frame (12, 20, 22), and a signal interface (16) for transmitting interface signals to an external device (e.g., an amplifier). Pecoraro does not disclose the use of individual foot controllers which are readily positionable (i.e., adjustable position) within any of a plurality of mounting locations of the mounting frame. Furman discloses a pedal board (i.e., foot controller) wherein the foot controller modules are readily positionable within any of a plurality of mounting locations (see page 1, col. 2, see paragraphs titled Prepare Pedals and Create a layout). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the

modules of Pecoraro readily positionable. The motivation for making the Pecoraro modules position-adjustable would be to allow, say, someone not comfortable balancing on his or her right foot to control a module so that balancing could be accomplished on the musicians left foot. Another motivation would be to allow a musician to quickly control two or more modules by placing them next to each other – for example to increase the distortion and compression for a guitar solo after playing a clean rhythm. Yet another motivation would be place modules to lessen the noise and hum and to increase signal strength (this is suggested by Furman). Regarding claims 2 and 16, Pecoraro shows an electrical power infrastructure (unnumbered, see excerpt from fig. 3):



Regarding claim 3, pedals (26, fig. 3) disclose the use of switches. Regarding claim 4, Pecoraro discloses the use of foot pedals (28, fig. 3). Regarding claim 5, while Pecoraro is silent as to foot pedals that provide a simultaneous “plurality of adjustable parameters,” Official Notice is taken that the foot pedals shown in Pecoraro’s figure 3

possess control knobs for adjusting parameters that are simultaneously provided to an external device;



Regarding claims 6 – 10, 12, 17 and 18, the Examiner maintains that any pedal (especially the rocker-type) will provide tactile control (i.e., the user can physically feel the degree to which a pedal is activated), all pedals shown by Pecoraro will be activated in accordance with pressure and/or impact. Regarding claim 14, Pecoraro shows in fig. 3, that interface (16) is mounted to frame (20) via elements (38). Regarding claim 13, the use of “organ-style bass pedals” is deemed to be functionally equivalent to any (especially the rocker-type) pedals shown in fig. 3 – organ-style pedals are essentially pivotal lever activated switches.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pecoraro and "Furman" (both discussed supra) and in further view of Gillaspy (5,506,371). Regarding independent claim 1, the teachings of Pecoraro and Furman have been discussed supra. Pecoraro does not teach the use of a strum pad operating as a foot pedal. Gillaspy discloses that strum pads may be substituted for foot pedals (col. 4, lines 3 – 5). It would be obvious to one of ordinary skill in the art to combine the teachings of Pecoraro, Furman, and Gillaspy to obtain a floor controller having a strum pad control unit. The motivation for making this combination is to complement the degree to which control can be made from the feet, thus freeing the hands.

Response to Arguments

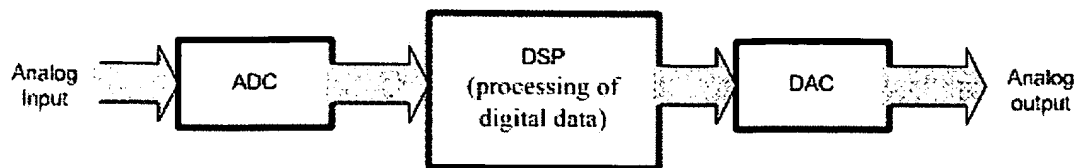
5. Applicant's arguments, filed March 7, 2006, with respect to the rejection(s) of claims 1 – 10 and 12 – 18 under 35 U.S.C 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Applicant's points regarding a "readily positionable" foot controller module. The Examiner has responded to the Applicant's arguments by supplying a reference to establish a *prima facie* case of obviousness. The reference (to "Furman") clearly shows a plurality of "positionable" foot

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controller modules and suggests a motivation for repositioning the modules. The Applicant's arguments concerning Official Notice are hereby rendered moot.

6. The Applicant also argues that the sound control unit (16) of Pecoraro is not a signal interface. As defined by any reputable dictionary (the Examiner is using American Heritage, 2nd Ed., 1982), an interface is a connection between two or more systems. As Applicant admits, Pecoraro's controller (16) is a signal processor. In music (or in any audio system) a processed signal is of no value unless the signal can ultimately be heard by the human ear. The Examiner maintains that the signal processor interfaces the musical instrument (as well as the controller modules) and the system that enables the instrument to be heard by a human, for example, an amplifier, a recording device, etc. The Examiner would like to point out that even an instrument cord (e.g., a guitar cord) can read as an interface. Certainly, the use of a guitar cord is within the scope of one of ordinary skill in the art and would inherently be required by Pecoraro. Specifically, the Applicant argues that the controller 16 is not "adapted to transmit interface signals to an external system." As Applicant admits, the controller 16 is an "audio signal processing device" and, to those of ordinary skill in the art, an audio signal processing device typically interfaces an instrument and either a recording device or an amplifier to ultimately allow the sound to be heard. The following diagram is provided for the Applicant's convenience (taken from wikipedia.com):

- [A signal processor] [t]akes digital data from ADC (Analog-Digital Converter) and passes out data which is finally output by converting into analog by DAC (Digital-Analog Converter).

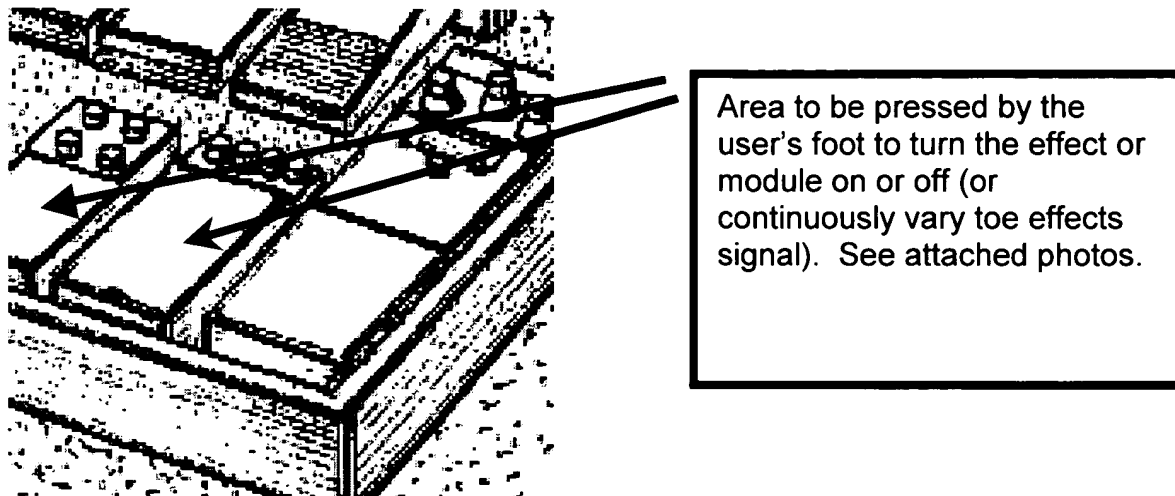


As can clearly be seen by the well-known diagram, the DSP (i.e. the audio processing unit interfaces between the ADC (e.g., from an instrument) and the DAC (e.g., to a mixer or amplifier). The same scenario applies to analog processors. Again, the Examiner maintains that processing musical instrument signal is of no value unless it can ultimately be heard by a human. The Applicant further argues that “said interface signals are generated in response to one or more of said electrical signals generated by said plurality of individual foot controller modules.” Again, by Applicants own admission (as well as Pecoraro’s disclosure) Pecararo shows that “sound control unit 16 may be electrically connected to the electronic components 14.” In which case, wouldn’t the interface signals (i.e., those signals output from controller 16) be generated in response to one of the individual foot controllers? This applies to situations where the signal from 14 is fed to 16, or where the signal from 16 is fed to 14.

7. The Applicant, makes a second attempt to show that a *prima facie* case for obvious has not been met by arguing that *In re Stevens* does not apply. As above, this argument is rendered moot by the new reference to Furman. While the Applicant’s remarks are valid, the Examiner would only like to point out that many guitarists, for the last several decades, have used various types of pedal boards or cases, that allow musicians to purchase commercially available foot controller modules (“stomp boxes”) and configure them in any suitable fashion.

8. The Applicant also argues that Pecoraro does not disclose a plurality of specific locations. Furman discloses the ability to reposition modules. Repositioning can only be performed if a plurality of locations are available.

9. The Applicant argues that the elements (14 and 26) of Pecoraro operate in response to “audio signals” and are not responsive to “user operation.” The title of the Pecoraro patent includes the word “pedal” (any dictionary will describe a “pedal” as a device operated by the foot). Furthermore, the drawings of Pecoraro disclose foot controllers (col. 6, lines 40 – 41). The Examiner fails to understand how a foot controller (or pedal) is audio responsive and not responsive to “user operation.” Finally, these devices shown by Pecoraro have been used by many electric guitarists for the past several decades (a cursory review of any old music catalog will provide corroboration). While Pecoraro is silent to this fact, one of ordinary skill would immediately recognize that the elements 26 are drawings of commercially available devices used as foot switches (the flat spaces beneath the knobs are used to turn on (i.e., generate the signal). Again, any reference to any music catalog will corroborate this fact.



The Examiner has included several examples for the Applicant's convenience. In other words, contrary to Applicant's assertion, the modules are not responsive to audio signals, but instead are responsive to user operation (col. 6, lines 40 – 41). The Applicant argues that "simply put, Pecoraro relates to 'audio signals,' whereas claim 1 utilizes 'user operation.'" As previously stated, this is simply erroneous.

10. The Applicant's remarks regarding claim 11 are rendered moot by the use of "Furman."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dsw


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER